Science Education

Formerly GENERAL SCIENCE QUARTERLY

The Official Journal of the National Association for Research in Science Teaching, the National Council on Elementary Science, and the Science Association of the Middle States

Copyright 1937 by Science Education, Inc.

EDITORIAL COMMITTEE

CHARLES J. PIEPER, *Editor*
32 Washington Place,
New York University,
New York, N. Y.

CLARENCE M. PRUITT, *Business Manager*
Lime and Green Streets, Lancaster, Pa., or
Evansville College,
Evansville, Indiana.

REPRESENTATIVES OF AFFILIATED ASSOCIATIONS

S. RALPH POWERS
Representing the N.A.R.S.T.

LOIS MEIER SHOEMAKER
Representing N.C.E.S.

W. L. EIKENBERRY
Representing S.A.M.S.

VOLUME 21—Numbers 1 to 5

JANUARY, 1937—DECEMBER, 1937

SCIENCE EDUCATION, INCORPORATED
525 WEST 120 STREET
NEW YORK CITY

Published
February, April, October, November
and December, 1937

THE SCIENCE PRESS PRINTING CO.
LANCASTER, PA.

Education
Faxon

INDEX TO VOLUME 21

ARTICLES

Astronomy, A Sixth-Grade Unit in, Lola F. Eastlack, 24–27

Bailey, Edna W., Contribution of Natural History to Health Education, 134–136
Biology Interests of Sophomore High-School Girls? What are the, Gladys M. Relyea, 152–155
Biology on the Air, W. E. Bruner and Students, 181–185
Biology, The Morrison Unit in, Thomas F. Morrison, 7–10
Bruce, G. V., Elementary School Science References and Instructional Materials, 31–34
Bruner, W. E., and Students, Biology on the Air, 181–185

Caldwell, Otis W., The Next Ten Years in Science Education, 61–64
Carpenter, Harry A., Science in the Rochester School of the Air, 77–81
Conklin, Edwin G., The Aims of Science Teaching, 1–4
Curriculum Investigations in Higher Education and Their Implications for Science Teaching in Elementary and High Schools, Tendencies Disclosed by, A. W. Hurd, 147–151

Demonstrating the Production of Oxygen by a Photosynthesizing Plant, A New Method of, Abraham Raskin, 231–234

Eastlack, Lola F., A Sixth-Grade Unit in Astronomy, 24–27
Elementary-School Program, Science Materials and Equipment for the, Ellis C. Persing, 136–140
Elementary Science in Austin, Recent Developments in, Vesta Hicks, 131–134

Fact Versus Theory, Monroe F. Offner, 28–30

Glenn, Earl R., The Need for a National Publication for Science Teachers, 82–87
Goldstein, Philip, Student Laboratory Work Versus Teacher Demonstration as a Means of Developing Laboratory Resourcefulness, 185–193

Hatch, Roy B., The Relative Claims of Natural Science and of Social Studies to a Core Place in the Secondary School Curriculum, B.—For Social Science, 71–76
Health Education, Contribution of Natural History to, Edna W. Bailey, 134–136
Health Education, How Science Teaching May Reinforce, Ruth Strang, 173–177
Hicks, Vesta, Recent Developments in Elementary Science in Austin, 131–134
Hultz, Helen Lorraine, Mushrooms: A Third-Grade Project, 17–21
Hunter, George W., Some Notes on Science Teaching in English Schools, 225–231
Hurd, A. W., Tendencies Disclosed by Curriculum Investigations in Higher Education and Their Implications for Science Teaching in Elementary and High Schools, 147–151

Johnson, John C., Some Important Considerations in the Education of Science Teachers, 4–7

Laboratory Resourcefulness, Student Laboratory Work Versus Teacher Demonstration as a Means of Developing, Philip Goldstein, 185–193
Lawrence, Albert, Jr., The Origin of Effective Learning, 21–24
Learning, The Origin of Effective, Albert Lawrence, Jr., 21–24

Mathematical Requirements for the First Courses in General College Physics, Karl F. Oerlein, 241–245
Morrison, Thomas F., The Morrison Unit in Biology, 7–10

National Publication for Science Teachers, The Need for a, Earl R. Glenn, 82–87
Natural Science, and of Social Studies to a Core Place in the Secondary School Curriculum, A.—For Natural Science, The Relative Claims of, Oscar Riddle, 65–71
Natural Science, and of Social Studies to a Core Place in the Secondary School Curriculum, B.—For Social Science, The Relative Claims of, Roy W. Hatch, 71–76
Newland, Eveus, A Study of Allusions to Science in Magazines, 126–130

Oerlein, Karl F., Mathematical Requirements for the First Courses in General College Physics, 241–245
Offner, Monroe F., Fact Versus Theory, 28–30

Persing, Ellis C., Science Materials and Equipment for the Elementary-School Program, 136–140
Pieper, Charles J., Research Studies Relating to the Teaching of Science, 88–97
Pruitt, Clarence M., Survey Courses in the Natural Sciences, 10–16

Radio Fade-Outs and Solar Eruptions, R. S. Richardson, 193–198
Raskin, Abraham, A New Method of Demonstrating the Production of Oxygen by a Photosynthesizing Plant, 231–234

References and Instructional Materials, Elementary School Science, G. V. Bruce, 31–34
Relyea, Gladys M., What are the Biology Interests of Sophomore High School Girls?, 152–155
Research Studies Relating to the Teaching of Science, Charles J. Pieper, 88–97
Richardson, R. S., Radio Fade-Outs and Solar Eruptions, 193–198
Riddle, Oscar, The Relative Claims of Natural Science and of Social Studies to a Core Place in the Secondary School Curriculum, A.—For Natural Science, 65–71

Science Education, The Next Ten Years in, Otis W. Caldwell, 61–64
Science in Magazines, A Study of Allusions to, Eveus Newland, 126–130
Science in the Rochester School of the Air, Harry A. Carpenter, 77–81
Science Teachers, Some Important Considerations in the Education of, John C. Johnson, 4–7
Science Teaching in English Schools, Some Notes on, George W. Hunter, 225–231
Science Teaching, The Aims of, Edwin G. Conklin, 1–4
Science Tests in Philadelphia Public High Schools. Results and Interpretations, The Cooperative, Edw. E. Wildman, 178–180
Scientific Attitudes and Abilities Among Ninth-Year Pupils, A Study in the Establishment of a Norm in, George C. Wood, 140–146
Scientific Method?, Why not Teach the, Philip B. Sharpe, 235–240
Sharpe, Philip B., Why not Teach the Scientific Method?, 235–240
Strang, Ruth, How Science Teaching May Reinforce Health Education, 173–177
Survey Courses in the Natural Sciences, Clarence M. Pruitt, 10–16

Taylor, Aravilla Meek, Teaching Beginning Zoology without Dissection, 245–248
Third-Grade Project, Mushrooms: A, Helen Lorraine Hultz, 17–21

Wildman, Edw. E., The Cooperative Science Tests in Philadelphia Public High Schools. Results and Interpretations, 178–180
Wood, George C., A Study in the Establishment of a Norm in Scientific Attitudes and Abilities Among Ninth-Year Pupils, 140–146

Zoology without Dissection, Teaching Beginning, Aravilla Meek Taylor, 245–248

CLASSROOM NOTES

Anderson, Bertil G., A New Method for Mounting a Frog for Demonstrating Circulation in the Web, 38

Barometer, The Construction and Operation of a Water, George D. Uibel, 158–159
Bergren, Leslie, Aids for the Biology Teachers, 249–250
———, Collecting Equipment for the Biology Teacher, 199–200
———, Riker Display Mounts, 100
Biology Teachers, Aids for the, Leslie Bergren, 249–250
Brandwein, Paul F., and Rabinowitz, Morris, Certain Substitutes for Paramoecium Caudatum in High-School and College Biology, 156–158
Broome, Frank H., The Wheatstone Circuit is not Outmoded, 98–100

Chemical Christmas Tree, A, Ralph E. Dunbar, 100–101
Circulation in the Web, A New Method for Mounting a Frog for Demonstrating, Bertil G. Anderson, 38
Collecting Equipment for the Biology Teacher, Leslie Bergren, 199–200

Dunbar, Ralph E., A Chemical Christmas Tree, 100–101

Good, Frederick F., Vibrating Air Columns—Simple Demonstrations, 35–38
Grier, N. M., Other Useful Plants for Biology Teachers, 159, 199

Lever, Qualitative Experiments with the, E. Thompson Richardson, 250

Metric System, Unity in the, Donald R. Watson, 156
Museum Model as a Construction Project, A, Gordon M. Taylor, 101–102

Paramoecium Caudatum in High-School and College Biology, Certain Substitutes for, Paul F. Brandwein and Morris Rabinowitz, 156–158
Plants for Biology Teachers, Other Useful, N. M. Grier, 159, 199

Richardson, E. Thompson, Qualitative Experiments with the Lever, 250
Riker Display Mounts, Leslie Bergren, 100

Taylor, Gordon M., A Museum Model as a Construction Project, 101–102

Uibel, George D., The Construction and Operation of a Water Barometer, 158–159

Vibrating Air Columns—Simple Demonstrations, Frederick F. Good, 35–38

Watson, Donald R., Unity in the Metric System, 156
Wheatstone Circuit is not Outmoded, The, Frank H. Broome, 98–100

ABSTRACTS

Aaron, S. F., Misinterpreted Animal Observations, 111
Abbott, C. G., The Influence of Solar Variability on Weather, 111
Accidents, Common Household, Louis L. Lefkowitz, 113
Achievement in the Physical Sciences, Evaluation of Student, Alpheus W. Smith, Ralph W. Tyler, and Louis M. Heil, 254
Airplanes, Studying, Glenn O. Blough, 256
Allen, Arthur A., Hunting with a Microphone the Voices of Vanishing Birds, 257
American High School, The, Symposium, 44
Anderson, O. S., Complete Learning Through Visual Aids in Physics, 255
Andrews, Roy Chapman, Behind that Door, 163
———, Consider the Dinosaur, 257
Anesthesia, General, James T. Gwathmey, 114
Anibal, Fred G., and Leighton, Phillip A., A Plan to Eliminate the Overlapping in High School and College Science Courses, 48
Animal Observations, Misinterpreted, S. F. Aaron, 111
Anonymous, A Million-Pound Eye for Star Gazers, 209
———, Exploring Up and Down, 113
———, New Power from the Sun, 113
———, Smashing Atoms, 207
Antarctica, My Flight Across, Lincoln Ellsworth, 111
Armagnac, Alden P., New Feats of Chemical Wizards Remake the World We Live in, 114
Arts and Sciences, Harvard Tercentenary Conference of, Symposium, 163
Astronomy, A Unit on, Ercelle Bennett, 47
Atoms, Smashing, Anonymous, 207
Athlete's Heart, Allen S. Johnson, 113
Atkinson, Agnes Akin, Where Birds and Little Animals Find Haven, 111

Babcock, Russel B., A Seventh Grade Course in Sex Education, 47
Baggaley, E. J., The School Science Exhibition, 47
Baker, C. P., and White, W. C., Adapting the Project Method to Undergraduate Instruction in Chemical Engineering, 208
Baker, Ross A., Some Trends in Chemical Education, 48
Bakery, A Unit on the, Agnes G. Gunderson, 256
Bancroft, Ida E., A Study of Evergreen Trees, 47
Behind That Door, Roy Chapman Andrews, 163
Beltran, Enrique, The Place of the Biological Sciences in Educational Programs, 46
Bennett, Ercelle, A Unit on Astronomy, 47
Billboard of Flame, Edwin Teale, 164
Biological Sciences in Educational Programs, The Place of the, Enrique Beltran, 46
Biological Sciences, The Contribution of the, A. J. Carlson, 164
Biology in the Education of New Germany, Alex S. Gillespie, 44
Bird Homes, Evelyn L. Townsend, 256
Birds and Little Animals Find Haven, Where, Agnes Akin Atkinson, 111
Birds, Hunting with a Microphone the Voices of Vanishing, Arthur A. Allen, 257
Bird Study, Wilma Gunn May, 256
Black Widow and Her Insect Enemy, Life Story of the, George Elwood Jenks, 111
Blough, Glenn O., Studying Airplanes, 256
Blough, Glenn O., and Brink, Ida K., The Study of Magnets, 256
Brauer, Oscar, Engwicht, Harry Greene, Earnest S., and Moreland, Willard H., Communication, 256
Brown, F. D., Difficulties in the Application of Uniform Tests in Chemistry, 165
Burton, Walter E., Beware of the Tick, 114

Cady, Lee D., Carbon Monoxide Poisoning, 113
———, Snakes in the Service of Science, 113
Carbon Monoxide Poisoning, Lee D. Cady, 113
Carleton, R. K., and Ince, J. W., Lessons from Twelve Years of Chemistry Contests, 206
Carlson, A. J., The Contribution of the Biological Sciences, 164
Chemical Education, Some Trends in, Ross A. Baker, 48
Chemical Engineering, Adapting the Project Method to Undergraduate Instruction in, C. P. Baker and W. C. White, 208
Chemical Engineering Education in United States, Résumé of, Frank C. Vilbrandt, 48
Chemical History in the High School, The Use of, Greta Oppe, 47
Chemical Laboratories West of the Mississippi, Early, Harrison Hale, 164
Chemical Wizards Remake the World We Live in, New Feats of, Alden P. Armagnac, 114
Chemist Looks at Culture, A, H. G. Deming, 164
Chemistry, An Objective-type Test for Organic, H. E. Phipps, 164
Chemistry Based on Scientific Journals, An Advanced Course in General, Vaughn W. Floutz, 48
Chemistry, Contests, Lessons from Twelve Years of, R. K. Carleton, and J. W. Ince, 206
Chemistry, Illustrative Test Exercises in High School, F. P. Frutchey, 255
Chemistry in Chemical Education, The Place of Colloid, L. A. Munro, 208
Chemistry Instruction, Evaluating, Fred P. Frutchey, 208
Chemistry, Retention in High School, F. P. Frutchey, 255
Chemistry, Some Departures from Classical Laboratory Methods in General, Harriett H. Fillinger, 208
Chemistry, Some Devices for Combating Verbalism in the Teaching of Elementary, Glen Wakeham, 206
Chemistry, Special Problems in the Teaching of, Warren C. Johnson, 48
Chemistry Textbooks, The Organic Content of Twelve High-School, Ralph E. Dunbar, 165

Chemistry, Visual Instruction Project in Laboratory, J. M. Levell, 207
Clendening, Logan, The Doctor Abroad—Egypt, 112
———, The Doctor Abroad—France, Part I, 113
———, The Doctor Abroad—Italy, Part I, 112
———, The Doctor Abroad—Italy, Part II, 112
Cloth, Learning About, Katherine L. Julian, 47
Coal and Its By-Products, Mary H. Wright, 47
Cole, H. N., The Skin in Health and Disease, Part I, 114
Communication, Oscar Brauer, Harry Engwicht, Earnest S. Greene, and Willard H. Moreland, 256
Communication, Symposium, 47
Comprehensive, Basis for Evaluation, Louis Raths, 44
Compton, Karl T., Science in an American Program for Social Progress, 208
Cosmology, The Present Status of, Richard C. Tolman, 164
Craig, Gerald S., Science and Elementary Education, 254
Cumberland, Maryellen, Soils, 46
Cunningham, Juanita, Trees and Seeds, 256
Curran, C. H., How Insects Protect Their Eggs, 111
Curriculum Material, Children's Questions as a Source of, Edgar Dale, 254
Curriculum Revision, Scope and Sequence as Applied to, Symposium, 209

Daffin, John B., Why the Woman Student Does not Elect Physics, 255
Dale, Edgar, Children's Questions as a Source of Curriculum Material, 254
Damrau, Frederic, Food or Poison, 163
Davis, C. B., Queer Flying Things, 257
Deming, H. G., A Chemist Looks at Culture, 164
DeWitt, Charles B., The Household Comes to the Laboratory, 206
Dinosaur, Consider the, Roy Chapman Andrews, 257
Doctor, Abroad—Egypt, The, Logan Clendening, 112
Doctor, Abroad—Italy, Part I, The, Logan Clendening, 112
Doctor Abroad—Italy, Part II, The, Logan Clendening, 112
Doctor, Abroad—France, Part I, The, Logan Clendening, 113
Drug Menace—Marijuana, Uncle Sam Fights a New, William Wolf, 111
Dunbar, Ralph E., The Organic Content of Twelve High-School Chemistry Textbooks, 165

Education of Teachers in New College, Symposium, 44
Ellis, Brooks F., The Master Key to Oil, 164
Ellsworth, Lincoln, My Flight Across Antarctica, 111
Emmert, Wilbur, How to Construct and Use Star Maps, 207
Evergreen Trees, A Study of, Ida E. Bancroft, 47
Exploring Up and Down, Anonymous, 113

Fillinger, Harriett H., Some Departures from Classical Laboratory Methods in General Chemistry, 208
Films, 1000 and One Best, The Educational Screen, 255
Fitzpatrick, F. L., Pupil Testimony Concerning Their Science Interests, 254
Floutz, Vaughn W., An Advanced Course in General Chemistry Based on Scientific Journals, 48
Flying Things, Queer, C. B. Davis, 257
Food or Poison, Frederic Damrau, 163
Foods, The Story of, Katherine L. Julian, 257
Fossils are Collected, How, George Gaylord Simpson, 257
Francis, Thomas, The Laboratory Shop in the Small Rural High School, 207
Frauds That Flourish Until Uncle Sam Takes a Hand, S. R. Winter, 112
Freeman, Frank N., Heredity and Environment in the Light of the Study of Twins, 209
Frutchey, Fred P., Evaluating Chemistry Instruction, 208
———, Illustrative Test Exercises in High School Chemistry, 255
———, Retention in High School Chemistry, 255

Geithmann, Harriet, The Glamour of the Giant's Causeway, 163
General Science as Portrayed on Stamps, Harold F. Schaeffer, 47
Geography?, Why Failures in the Study of, H. H. Hahn, 46
Giant's Causeway, The Glamour of the, Harriet Geithmann, 163
Gilbertson, L. J., A Study of Student Results in Qualitative Analysis, 208
Gillespie, Alex S., Biology in the Education of New Germany, 44
Grass-Roots, Frank Thone, 163
Green, Charlotte Hilton, Migration, 257
Gunderson, Agnes G., A Unit on the Bakery, 256
Gwathmey, James T., General Anesthesia, 114

Hahn, H. H., Why Failures in the Study of Geography?, 46
Hale, Harrison, Early Chemical Laboratories West of the Mississippi, 164
Hall, Alton L., The New Assistant, 206
Ham, L. B., High-School Physics as Preparation for College Physics, 165
Health and Disease, Part I, The Skin in, H. N. Cole, 114
Heffernan, Helen, A State-Wide Program of Science Education in Elementary Schools, 46
Helm, Emma J., The Mississippi Valley, 256
Heredity and Environment in the Light of the Study of Twins, Frank N. Freeman, 209
Hildebrand, J. R., Trains of Today—and Tomorrow, 163
Hoff, A. G., A Test for Scientific Attitude, 207

Hoffman, Josephine, News Notes, 255
Holmes, Harry N., The Contribution of the Physical Sciences, 164
Home Study, The Problem of, Louis Jones, 209
Howard, Joseph W., Opals, 163
Human Biology, Symposium, 48
Hussong, Clara, September Nature Lessons, 256

Ice from Thunderclouds, Charles Fitzhugh Talman, 163
Insects Protect Their Eggs, How, C. H. Curran, 111
Insects versus Health, Winter, George H. Skinner, 113
Invention, Progress by, Isobel Willcox, 256

Iodine, The Quest for, William A. Plummer, 113

Jenks, George Elwood, Life Story of the Black Widow and Her Insect Enemy, 111
Johnson, Allen S., Athlete's Heart, 113
Johnson, Warren C., Special Problems in the Teaching of Chemistry, 48
Jones, Louis, The Problem of Home Study, 209
Julian, Katherine L., Learning About Cloth, 47
———, The Story of Foods, 257
Junior College Cultural and Vocational Completion Courses, Symposium, 209

Laboratory Shop in the Small Rural High School, The, Thomas Francis, 207
Laboratory, The Household Comes to the, Charles B. DeWitt, 206
Laboratory Work, Important Criteria in Evaluating, H. I. Schlesinger, 45
Lefkowitz, Louis L., Common Household Accidents, 113
Levell, J. M., Visual Instruction Project in Laboratory Chemistry, 207
Long, C. H., Sectioning A General Physics Lecture Course in Order to Adapt Instruction to Ability, 165

Machine Brains, Breeding, Philip H. Smith, 111
Machine-Made Jobs, Wilfred Owen, 165
Magnets, The Study of, Glenn O. Blough, and Ida K. Brink, 256
Makousky, Lauretta, Power, 256
Marsh, L. Alden, Programs for Nature Clubs, 256
May, Wilma Gunn, Bird Study, 256
Meat Packing, Eleanor Wharton, 46
Melrose, Mary, Outcomes of the Cleveland Studies in Science, 46
Migration, Charlotte Hilton Green, 257
Miner, Roy Waldo, Sea Creatures of Our Atlantic Shores, 111
Mississippi Valley, The, Emma J. Helm, 256
Moody, F. W., Portable Units for Physics Demonstration, 206
Moore, Gertrude, Squirrels, 46
Morrison, Edwin, Can College Physics be Popularized?, 165
Morse, Stanley W., Water, Its Conservation and Use, 256
Motion Pictures Available for Use in Physics Instruction, Cecil O. Riggs, 255
Munro, L. A., The Place of Colloid Chemistry in Chemical Education, 208

Nature Clubs, Programs for, L. Alden Marsh, 256
Nature Lessons, September, Clara Hussong, 256
Nebula?, Are We Inside a Dark, Henry Norris Russell, 111
News Notes, Josephine Hoffman, 255
Nutting, J. Morley, Weather, 206

Oerlein, Karl F., Mathematical Difficulty in College Physics, 208
Oil, The Master Key to, Brooks F. Ellis, 164
Opals, Joseph W. Howard, 163
Oppe, Great, The Use of Chemical History in the High School, 47
Owen, Wilfred, Machine-Made Jobs, 165

Palmer, Frederick, The Helpfulness of Objective Tests in Physics, 206
Palmer, Laurence E., Spiders and Their Kin, 46
———, Teachers' Number, 47
Phipps, H. E., An Objective-type Test for Organic Chemistry, 164
Physical Sciences, The Contribution of the, Harry N. Holmes, 164
Physics as Preparation for College Physics, High-School, L. B. Ham, 165
Physics be Popularized?, Can College, Edwin Morrison, 165
Physics Demonstration, Portable Units for, F. W. Moody, 206
Physics Lecture Course in Order to Adapt Instruction to Ability, Sectioning a General, C. H. Long, 165
Physics, Mathematical Difficulty in College, Karl F. Oerlein, 208
Physics, Why the Woman Student Does not Elect, John B. Daffin, 255
Plummer, William A., The Quest for Iodine, 113
Power from the Sun, New, Anonymous, 113
Power, Lauretta Makousky, 256
Powers, Samuel Ralph, Influences of Science on Human Activities with Implications for Education, 254
Power, Symposium, 47
Preston, C. E., The Science Column, 207
———, The Science Column, 207
———, The Science Column, 206

Qualitative Analysis, A Study of Student Results in, L. J. Gilbertson, 208

Raths, Louis, Basis for Comprehensive Evaluation, 44
Report of the Committee on Examinations and Tests, The 1935–36 College Chemistry Testing Program, 164
Research Parade, Symposium, 163
Riggs, Cecil O., Motion Pictures Available for Use in Physics Instruction, 255
Rubber, Rosemary Tray, 46

Russell, Henry Norris, Are We Inside a Dark Nebula?, 111

Salt, The Story of, Hendrik Willem Lan Loon, 257
Sane, Are You, William Wolf, 164
Sawyer, Edmund J., Hollow Tree Homes, 256
Schaeffer, Harold F., General Science as Portrayed on Stamps, 47
Schlesinger, H. I., Important Criteria in Evaluating Laboratory Work, 45
Science and Elementary Education, Gerald S. Craig, 254
Science Club Number, Special, Symposium, 47
Science Column, The, Carleton E. Preston, 206
Science Column, The, C. E. Preston, 207
Science Courses, A Plan to Eliminate the Overlapping in High School and College, Fred G. Anibal and Phillip A. Leighton, 48
Science Education in Elementary Schools, A State-Wide Program of, Helen Heffernan, 46
Science Exhibition, The School, E. J. Baggaley, 47
Science in an American Program for Social Progress, Karl T. Compton, 208
Science Interests, Pupil Testimony Concerning Their, F. L. Fitzpatrick, 254
Science Number, Symposium, 45
Science on Human Activities with Implications for Education, Influences of, Samuel Ralph Powers, 254
Science, Outcomes of the Cleveland Studies in, Mary Melrose, 46
Science Teacher Know?, What Should the High School, Ralph K. Watkins, 45
Scientific Attitude, A Test for, A. G. Hoff, 207
Sea Creatures of Our Atlantic Shores, Roy Waldo Miner, 111
Seed Dissemination, M. K. Stauffer, 46
Sex Education, A Seventh Grade Course in, Russel B. Babcock, 47
Simpson, George Gaylord, How Fossils are Collected, 257
Skinner, George H., Winter Insects versus Health, 113
Smith, Alpheus W., Tyler, Ralph W., and Heil, Louis M., Evaluation of Student Achievement in the Physical Sciences, 254
Smith, Helen, Stratosphere Balloons, 256
Smith, Philip H., Breeding Machine Brains, 111
Snakes in the Service of Science, Lee D. Cady, 113
Soils, Maryellen Cumberland, 46
Solar Variability on Weather, The Influence of, C. G. Abbott, 111
Spiders and Their Kin, Laurence E. Palmer, 46
Squirrels, Gertrude Moore, 46
Star Gazers, A Million-Pound Eye for, Anonymous, 209
Star Maps, How to Construct and Use, Wilbur Emmert, 207
Stauffer, M. K., Seed Dissemination, 46
Stetson, Harlan T., The Influence of the Sun on Human Affairs, 114
Stevens, Capt. Albert W., The Scientific Results of the World-Record Stratosphere Flight, 112
Stratosphere Balloons, Helen Smith, 256
Stratosphere Flight, The Scientific Results of the World-Record, Capt. Albert W. Stevens, 112
Sun on Human Affairs, The Influence of the, Harlan T. Stetson, 114
Swann, W. F. G., Is the Universe Running Down?, 112
Symposium, Communication, 47
———, Education of Teachers in New College, 44
———, Harvard Tercentenary Conference of Arts and Sciences, 163
———, Human Biology, 48
———, Junior College Cultural and Vocational Completion Courses, 209
———, Power, 47
———, Research Parade, 163
———, Science Number, 45
———, Scope and Sequence as Applied to Curriculum Revision, 209
———, Special Science Club Number, 47
———, Teacher Education Number, 44
———, The American High School, 44

Talman, Charles Fitzhugh, Ice from Thunderclouds, 163
Teacher Education Number, Symposium, 44
Teachers' Number, Laurence E. Palmer, 47
Teale, Edwin, Billboard of Flame, 164
Testing Program, The 1935–36 College Chemistry, Report of the Committee on Examinations and Tests, 164
Testing Program, The Significance of a Comprehensive, Ralph W. Tyler, 165
Tests in Chemistry, Difficulties in the Application Uniform, F. D. Brown, 165
Tests in Physics, The Helpfulness of Objective, Frederick Palmer, 206
The Educational Screen, 1000 and One Best Films, 255
The New Assistant, Alton L. Hall, 206
Thone, Frank, Grass Roots, 163
Tick, Beware of the, Walter E. Burton, 114
Tolman, Richard C., The Present Status of Cosmology, 164
Townsend, Evelyn L., Bird Homes, 256
Trains of Today—and Tomorrow, J. R. Hildebrand, 163
Tray, Rosemary, Rubber, 46
Tree Homes, Hollow, Edmund J. Sawyer, 256
Trees and Seeds, Juanita Cunningham, 256
Twilight of the Old West, Clark Wissler, 257
Tyler, Ralph W., The Significance of a Comprehensive Testing Program, 165

Universe Running Down? Is the, W. F. G. Swann, 112

Vance, John Frazier, What Brings Them Home, 257
Van Loon, Hendrick William, The Story of Salt, 257
Vilbrandt, Frank C., Résumé of Chemical Education in United States, 48

Visual Aids in Physics, Complete Learning Through, O. S. Anderson, 255

Wakeham, Glen, Some Devices for Combatting Verbalism in the Teaching of Elementary Chemistry, 206
Washburn, Bradford, Exploring Yukon's Glacial Stronghold, 111
Water, Its Conservation and Use, Stanley W. Morse, 256
Watkins, Ralph K., What Should the High School Science Teacher Know?, 45
Wharton, Eleanor, Meat Packing, 46
Weather, J. Morley Nutting, 206
What Brings Them Home, John Frazier Vance, 257
Willcox, Isobel, Progress by Invention, 256
Winter, S. R., Frauds that Flourish Until Uncle Sam Takes a Hand, 112
Wissler, Clark, Twilight of the Old West, 257
Wolf, William, Are You Sane, 164
———, Uncle Sam Fights a New Drug Menace-Marijuana, 111
Wright, Mary H., Coal and Its By-Products, 47
Yukon's Glacial Stronghold, Exploring, Bradford Washburn, 111

NEW PUBLICATIONS

Adams, Ansel, Making a Photograph, 50
Alchemy, Modern, Dorothy M. Fisk, 51
Alchemy, Modern, William Albert Noyes and W. Albert Noyes, 51
Animals, A Parade of Ancient, Harold O. Whitnall, 171
Animal Tales, Alice V. Keliher and Laura Zirbes, 171
Ants, The Emperor of the, Luigi Bertelli, 116
Arnold, Herbert J., The Selection, Organization, and Evaluation of Localities Available for Unspecialized Field Work in Earth Science in the New York City Region, 224
Astronomy, An Introduction to, Robert H. Baker, 56
Astronomy, Arthur M. Harding, 259
Astronomy for the Layman, Frank Reh, 118
Astronomy, Highlights of, Walter Bartky, 122
Athey, Lillian Cox, Along Nature's Trails, 115
Atkins, Wesley C., Some Probable Outcomes of Partial Self-Direction in Tenth-Grade Biology, 54
Atwood, Wallace W., The United States Among the Nations, 52

Bacteriology and Its Applications. A Textbook of, Curtis M. Hilliard, 58
Bacteriology, A Textbook of, Thurman B. Rice, 124
Baitsell, G. A., Manual of Biology, 55
Baker, Robert H., An Introduction to Astronomy, 56
Barrows, Henry R., Elements of General Biology, 212
Bartky, Walter, Highlights of Astronomy, 122
Beaty, John Y., Story Pictures of Farm Animals, 116
———, Story Pictures of Farm Foods, 116
———, Story Pictures of Farm Work, 116
Beauchamp, Wilbur L., Grampton, Gertrude, and Gray, William S., Science Stories, Book I, 117
Beauchamp, Wilbur L., Fogg, Harriet M., Crampton, Gertrude, and Gray, William S., Science Stories, Book III, 259
Bell, Thelma Harrington, and Bell, Corydon, Nature Paint Book, 115
———, See America First Coloring Book, 115
Bengston, Nels A., and Van Royen, Willem, Fundamentals of Economic Geography, 53
Bennett, H., The Chemical Formulary, 54
Bergsmark, Daniel R., Economic Geography of Asia, 53
Bertelli, Luigi, The Emperor of the Ants, 116
Bible and Spade, Stephen L. Caiger, 169
Biddle, Harry C., and Rush, George L., Dynamic Chemistry, 51
Biology, A Laboratory Manual in General, James W. Mavor and Leonard B. Clark, 58
Biology, A Learning Guide in, Elliot R. Downing and Veva M. McAtee, 210
Biology, Elements of General, Henry R. Barrows, 212
Biology, Foundations of, Lorande Loss Woodruff, 55
Biology, General, James Watt Mavor, 58
Biology, Manual of, G. A. Baitsell, 55
Biology, Social, Everett P. Walton and Philip E. Foss, 119
Biology, Some Probable Outcomes of Partial Self-Direction in Tenth-Grade, Wesley C. Atkins, 54
Bird Protection, Adventures in, T. Gilbert Pearson, 218
Bishop, A. H. B., and Locket, G. H., An Elementary Chemistry, 124
Black, Newton H., An Introductory Course in College Physics, 54
Blough, Glenn O., Brink, Ida K., and Dolman, Helen, Elementary Science for all Grades, 215
Body, The Machinery of the, Anton J. Carlson, and Victor Johnson, 260
Botany, Principles and Problems, Edmund W. Sinnott, 56
Boyd, William, An Introduction to Medical Science, 259
Boyer, Philip A., Clark, Arthur S., Gordon, Hans C., and Shilling, John, A Learning Guide in General Science, 210
Boyer, Philip A., and Gordon, Hans, General Science Unit Tests, Arrangement B, 210
Bradt, W. E., Study Units in General Chemistry, 59
Bragdon, Lillian J., Tell Me the Time, Please, 51
Branson, E. B., and Tarr, W. A., Introduction to Geology, 56
Bray, Frank Chapin, The World of Myths, 52

Bridgman, P. W., The Nature of Physical Theory, 115
Briscoe, Herman T., Hunt, Hershel, and Whitacre, Francis M., A Laboratory Manual of General Chemistry, 221
Broadhurst, Jean, and Given, Leila I., Microbiology Applied to Nursing, 123
Brown, Robert M., and Thorp, Mary Tucker, Directed Geography Study, Book III, 52
Building America, James E. Mendenhall, 223
Buros, Oscar K., Educational, Psychological, and Personality Tests of 1933, 1934, and 1935, 115
Burton, Harry E., The Discovery of the Ancient World, 53
Bush, George L., Ptacek, Theodore W., and Kovats, John, Senior Science, Socialized for the High School, 210

Caiger, Stephen L., Bible and Spade, 169
Calendar, The Romance of the, P. W. Wilson, 167
Camera, How to Use Your Candid, Ivan Dmitri, 50
Camera, U. S., T. J. Maloney, 50
Candlelight Tales, Margaret S. G. Phelan, 215
Carlson, Anton J., and Johnson, Victor, The Machinery of the Body, 260
Carnegie Foundation for the Advancement of Teaching, The, Thirty-first Annual Report, 222
Carpenter, Frances, Our Little Friends of Norway, 211
Caswell, Hollis L., and Campbell, Doak S., Curriculum Development, 168
———, Readings in Curriculum Development, 259
Chapman, Wendell and Chapman, Lucie, Wilderness Wanderers, 216
Chase, Carl Trueblood, Frontiers of Science, 210
Chase, Stuart, Rich Land, Poor Land, 167
Chemical Formulary, The, H. Bennett, 54
Chemistry, A Laboratory Manual of General, Herman T. Briscoe, Herschel Hunt and Francis M. Whitacre, 221
Chemistry, An Elementary, A. H. B. Bishop and G. H. Locket, 124
Chemistry, Dynamic, Harry C. Biddle, and George L. Bush, 51
Chemistry, Experiments in, Howard B. Lewis and Lila Miller, 51
Chemistry, General, Harry N. Holmes, 213
Chemistry, Introduction to Theoretical, William Buell Meldrum and Frank Thomson Gucker, Jr., 58
Chemistry, Living, Ernestine M. J. Long, 170
Chemistry, Mastery Units in, G. F. Roberts and H. C. Smith, 170
Chemistry, Modern, Charles E. Dull, 169
Chemistry, Modern-Life, Frank O. Kruh, Robert H. Carleton, and Floyd F. Carpenter, 258
Chemistry of Food and Nutrition, Henry C. Sherman, 55
Chemistry, Recent Advances in General, Samuel Glasstone, 221
Chemistry, Study Units in General, W. E. Bradt, 59
Chemistry, The Drama of, Sidney J. French, 124
Chemist, The Home, Symposium, 54
Clothes, The Story Book of, Maud and Miska Petersham, 117
Cobb, Walter Frank, Health for Body and Mind, 118
College Teachers, An Open Letter to, Fernandus Payne and Evelyn Wilkinson Spieth, 168
Collins, A. Frederick, Fun with Electricity, 166
———, How to Understand Electricity, 166
———, The New World of Science, 166
———, The Radio Amateur's Handbook, 166
Coloring Book, See America First, Thelma Harrington Bell and Corydon Bell, 115
Compton and Company, F. E., Compton's Pictured Teaching Unit-Materials, 171
Conservation, Aids to the Student of, Stephen S. Visher, 260
Cosmic Rays Thus Far, Harvey Brace Lemon, 221
Cox, Philip W. L., and Langfitt, R. Emerson, High School Administration and Supervision, 214
Croneis, Carey, and Krumbein, William C., Down to Earth, 123
Croxton, W. G., Science and the Elementary School, 216
Culver, Charles A., A Textbook of Physics, 56
Curriculum Building, Foundations of, John K. Norton, and Margaret Alltucker Norton, 260
Curriculum Development, Hollis L. Caswell and Doak S. Campbell, 168
Curriculum Development, Readings in, Hollis L. Caswell, and Doak S. Campbell, 259
Curriculum, Remaking the, William H. Kilpatrick, 57
Curtis, Francis D., Workbook-Science for Today, 169
Curtman, Louis J., A Brief Course in Qualitative Chemical Analysis, 118

Darrow, Karl K., The Renaissance of Physics, 219
Davis, Ira C., and Sharp, Richard W., Science: A Story of Progress and Discovery, 120
Davis, Ira C., Directed Study Guide and Manual, 120
Davis, William S., Practical Amateur Photography, 122
Dent, John Yerbury, The Human Machine, 219
Deschin, Jacob, New Ways in Photography, 121
Dickinson, R. E., and Howarth, O. J. R., The Making of Geography, 53
Directed Activities II, S. R. Powers, Elsie F. Neuner and Herbert B. Bruner, 169
Directed Activities III, S. R. Powers, Elsie F. Neuner and Herbert B. Bruner, 169
Directed Study Guide and Manual, Ira C. Davis, 120
Discovery of the Ancient World, The, Harry E. Burton, 53
Ditmars, Raymond L., and Bridges, William, Wild Animal World-Behind the Scenes of the Zoo, 260
Dmitri, Ivan, How to Use Your Candid Camera, 50

Downing, Elliot R., and McAtee, Veva M., A Learning Guide in Biology, 210
Dubois, Gertrude and Frances, Peter and Penny Plant a Garden, 223
Duggan, Anne Schley, A Comparative Study of Undergraduate Women Majors and Non-Majors in Physical Education with Respect to Certain Personal Traits, 171
Dull, Charles E., Modern Chemistry, 169
Duncan, F. Martin, and Duncan, L. T., The Wonders of Nature Series, 51
Dunlap, Knight, Elements of Psychology, 49

Earth, Down to, Carey Croneis and William C. Krumbein, 123
Earth Science in the New York City Region, The Selection, Organization, and Evaluation of Localities Available for Unspecialized Field Work in, Herbert J. Arnold, 224
Edholm, Lizette, Ships Ahoy!, 215
Editorial Staff of Popular Science Monthly, Wonders Through the Microscope, 211
Education of a State Teachers College by Teachers in Service, An Evaluation of the Courses in, Roscoe George Linder, 213
Edwards, Eva D., Haruko, Child of Japan, 116
Eichler, Philip, A Philosophy of Science, 212
Electricity, Fundamentals of, Charles F. Petersen, 212
Electricity, Fun with, A. Frederick Collins, 166
Electricity, How to Understand, A. Frederick Collins, 166
Electricity in the Home and on the Farm, Forrest B. Wright, 219
Electricity, Lessons and Problems in, Newell C. Page, 55
Electric World, Our, Muriel Haynes, 215
Elementary Science for All Grades, Glenn O. Blough, Ida K. Brink, and Helen Dolman, 215
Evans, C. Lovatt, and Hartridge, H., Starling's Principles of Human Physiology, 123
Evans, Wainwright, The Thunder Bird, 215
Everett, Samuel, A Challenge to Secondary Education, 168
Examinations and their Substitutes in the United States, I. L. Kandel, 222

Farm Animals, Story Pictures of, John Y. Beaty, 116
Farm Foods, Story Pictures of, John Y. Beaty, 116
Farm Work, Story Pictures of, John Y. Beaty, 116
Fath, Edward Arthur, Through the Telescope, 49
Finch, Grant E., New England, 52
Finch, Vernon C., and Trewartha, Glenn T., Elements of Geography, 167
Fisher, G. Clyde, Nature's Secrets, 211
Fisk, Dorothy M., Modern Alchemy, 51
Fletcher, Gustav L., Mosbacher, Irving, and Lehman, Sidney, Unified Physics, 216
Flora, Oklahoma, Thomas R. Stemen and W. Stanley Myers, 222
Food and Health, Henry C. Sherman, 55
Food Products, Henry C. Sherman, 55
Fraprie, Frank R., The American Annual of Photography, 1937, 50
———, The American Annual of Photography, 1938, 258
French, George W., Photography for the Amateur, 49
French, Sidney J., The Drama of Chemistry, 124

Galileo to Cosmic Rays, From, Harvey Brace Lemon, 122
Garden, Peter and Penny Plant a, Certrude and Frances Dubois, 223
Garrison, Noble Lee, The Technique and Administration of Teaching, 168
General Science, A Learning Guide in, Philip A. Boyer, Arthur S. Clark, Hans C. Gordon and John Shilling, 210
General Science for Today, Ralph K. Watkins and Ralph C. Bedell, 120
General Science Unit Tests, Arrangement B, Philip A. Boyer and Hans Gordon, 210
Geography, C. Langdon White, and George T. Renner, 212
Geography, Elements of, Vernon C. Finch and Glenn T. Trewartha, 167
Geography, Fundamentals of Economic, Nels A. Bengston and Willem Van Royen, 53
Geography of Asia, Economic, Daniel R. Bergsmark, 53
Geography, Our U. S. A.—A Gay, Frank J. Taylor and Ruth Taylor, 123
Geography, Some Helps in the Teaching of, Harriet Smith and Adelphia Mitchell, 53
Geography, Book III, Directed Study, Robert M. Brown and Mary Tucker Thorp, 52
Geography, The Making of, R. E. Dickinson and O. J. R. Howarth, 53
Geology, Part II: Historical Geology, A Textbook of, Charles Schuchert and Carl O. Dunbar, 53
Geology, Introduction to, E. B. Branson and W. A. Tarr, 56
Glasstone, Samuel, Recent Advances in General Chemistry, 221
Gorillas, In Quest of, William K. Gregory and Henry C. Raven, 217
Gray, George W., The Advancing Front of Science, 258
Gregory, William K., and Raven, Henry C., In Quest of Gorillas, 217
Gruenberg, Benjamin, Science and the Public Mind, 223

Harding, Arthur M., Astronomy, 259
Harlow, Alvin F., Old Wires and New Waves, 221
Haruko, Child of Japan, Eva D. Edwards, 116
Haynes, Muriel, Our Electric World, 215
Health for Body and Mind, Walter Frank Cobb, 118
Health Stories, Anna B. Towse, Florence E. Mathews and William S. Gray, 117
Heavens, Consider the, Forest Ray Moulton, 260
Hegner, Robert W., College Zoology, 55

Henderson, W. B., Physics Guide and Laboratory Exercises, 171
High School Administration and Supervision, Philip W. L. Cox and R. Emerson Langfitt, 214
High School at Work, The Small, R. Emerson Langfitt, Frank W. Cyr and N. William Newsom, 213
High School Practices, Appraisal of Experimental, J. Wayne Wrightstone, 52
Hill, Charles, A Manual of Normal Histology and Organography, 124
Hilliard, Curtis M., A Textbook of Bacteriology and Its Applications, 58
Histology and Organography, A Manual of Normal, Charles Hill, 124
Holme, C. G., Modern Photography, 121
Holmes, Harry N., General Chemistry, 213
Hoskins, R. G., The Tides of Life, 259
How Men Kept Their Records, Michael Lipman, 215
Hoyt, Vance Joseph, Zorra: The Biography of a Gray Fox, 49
Hull, Ross A., The Radio Amateur's Handbook, 223
Human Anatomy, An Introduction to, Clyde Marshall, 123
Human Machine, The, John Yerbury Dent, 219
Human Physiology, Starling's Principles of, C. Lovatt Evans and H. Hartridge, 123
Human Progress, Early Steps in, Harold J. Peake, 116
Huxley, Julian and Andrade, E. N. daC., More Simple Science, 211

Idelson, Michael N., Mastery Units in Physics, 170
Industrial Research, Glances at, Edward R. Weidlein and William A. Hamor, 211
Industry, Materials of, Samuel Foster Mersereau, 51
Insects and Their Stories, Strange, A. Hyatt Verrill, 217
Iron and Steel, The Story Book of, Maud and Miska Petersham, 117
Irwin, Helen, Paddles to Propellers, 215

Jaffe, Bernard, Outposts of Science 166
Johnson, Thomas Cary, Jr., Scientific Interests in the Old South, 59
Jones, H. Spencer, Worlds without End, 56
Jordan, Franklin I., Photographic Enlarging, 121

Kandel, I. L., Examinations and Their Substitutes in the United States, 222
Karlson, Paul, The World Around Us, 124
Keliher, Alice V., and Zirbes, Laura, Animal Tales, 171
Keystone Primary Series, Symposium, 170
Kilpatrick, William H., Remaking the Curriculum, 57
Kruh, Frank O., Carleton, Robert H., and Carpenter, Floyd F., Modern-Life Chemistry, 258

Langdon-Davies, John, Radio, 166
Langfitt, R. Emerson, Cyr, Frank W., and Newsom, N. William, The Small High School at Work, 213
Lee, Richard E., The Backgrounds and Foundations of Modern Science, 219
Lemon, Harvey Brace, Cosmic Rays Thus Far, 221
———, From Galileo to Cosmic Rays, 122
Lewis, Howard B., and Miller, Lila, Experiments in Chemistry, 51
Life, The Tides of, R. G. Hoskins, 259
Linder, Roscoe George, An Evaluation of the Courses in Education of a State Teachers College by Teachers in Service, 213
Lipman, Michael, How Men Kept Their Records, 215
Locomotive, Raymond Loewy, 217
Loewy, Raymond, Locomotive, 217
Long, Ernestine M. J., Living Chemistry, 170
Long, J. S., Anderson, H. V., and Hazelhurst, T. H., Qualitative Analysis, 118
Lynde, Carleton John, Science Experiences with Home Equipment, 258

Maloney, T. J., U. S. Camera, 50
Mammals, The Eggs of, Gregory Pincus, 118
Marshall, Clyde, An Introduction to Human Anatomy, 123
Mavor, James W., and Clark, Leonard B., A Laboratory Manual in General Biology, 58
Mavor, James Watt, General Biology, 58
McGuffey Readers; William Holmes McGuffey, Old Favorites from the, Harvey C. Minnich, 167
Mechanics, Molecular Physics, Heat, and Sound, Robert Andrews Millikan, Duane Roller, and Ernest Charles Watson, 220
Medical Science, An Introduction to, William Boyd, 259
Mees, C. E. Kenneth, Photography, 121
Meldrum, William Buell, And Gucker, Frank Thomson, Jr., Introduction to Theoretical Chemistry, 58
Mendenhall, James E., Building America, 223
Mersereau, Samuel Foster, Materials of Industry, 51
Microbiology Applied to Nursing, Jean Broadhurst and Leila I. Given, 123
Microscope, Wonders Through the, Editorial Staff of Popular Science Monthly, 211
Milk, The Story of, Laura Zirbes and Marion J. Wesley, 171
Millikan, Robert Andrews, Roller, Duane, and Watson, Ernest Charles, Mechanics, Molecular Physics, Heat, and Sound, 220
Mills, Clarence A., Living with the Weather, 57
Minnich, Harvey C., Old Favorites from the McGuffey Readers; William Holmes McGuffey, 167
Mirsky, Jeannette, To the North, 116
Morris, Frederick K., The Making of the Valley, 53
Moseley, Edwin Lincoln, Trees, Stars, and Birds, 211

Moseley, Sydney A., and McKay, Herbert, Television, 221
Moulton, Forest Ray, Consider the Heavens, 260
Muller, H. J., Out of the Night, 212
Myths, The World of, Frank Chapin Bray, 52

Natural History of Mammals, Who's Who in the Zoo;, W. P. A. Federal Writers' Project in the City of New York, 218
Naturalists, Green Laurels; The Lives and Achievements of the Great, Donald Culross Peattie, 119
Natural Resources and Their Conservation, Our, E. A. Parkins and J. R. Whitaker, 54
Nature by Seaside and Wayside, Mary G. Phillips and Julia M. Wright, 50
Nature in the Wild, Frances Pitt, 220
Nature Paint Book, Thelma Harrington Bell and Corydon Bell, 115
Nature's Secrets, G. Clyde Fisher, 211
Nature's Trails, Along, Lillian Cox Athey, 115
Nature Study and the Biological Sciences, the Teaching of, Harrington Wells, 170
Neblette, C. B., Brehm, Frederick W., and Priest, Everett L., Elementary Photography, 121
New England, Grant E. Finch, 52
Newman, Horatio H., Outlines of General Zoology, 55
Nida, William L., Man Conquers the World with Science, 117
North, To the, Jeannette Mirsky, 116
Norton, John K., and Norton, Margaret Alltucker, Foundations of Curriculum Building, 260
Noyes, William Albert, and Noyes, W. Albert, Modern Alchemy, 51

Olcott, Frances Jenkins, Our Wonderful World, 213
Old Wires and New Waves, Alvin F. Harlow, 221
Other World Neighbors, J. Russell Smith, 53
Our Country and Northern Neighbors, J. Russell Smith, 53
Our European Neighbors, J. Russell Smith, 53
Our Industrial World, J. Russell Smith, 53
Our Little Friends of Norway, Frances Carpenter, 211
Out of the Night, H. J. Muller, 212
Outposts of Science, Bernard Jaffe, 166

Paddles to Propellers, Helen Irwin, 215
Page, Newell C., Lessons and Problems in Electricity, 55
Parkins, A. E., and Whitaker, J. R., Our Natural Resources and Their Conservation, 54
Payne, Fernandus, and Spieth, Evelyn Wilkinson, An Open Letter to College Teachers, 168
Peake, Harold J., Early Steps in Human Progress, 116
Pearson, T. Gilbert, Adventures in Bird Protection, 218
Peattie, Donald Culross, Green Laurels; The Lives and Achievements of the Great Naturalists, 119
Peattie, Roderick, Rambles in Europe, 115
Petersen, Charles F., Fundamentals of Electricity, 212
Petersham, Maud and Miska, The Story Book of Clothes, 117
———, The Story Book of Iron and Steel, 117
———, The Story Book of Wheels, 117
Pets, The Book of, Laura Zirbes and Alice V. Keliher, 171
Phelan, Margaret S. G., Candlelight Tales, 215
Phillips, Mary G., and Wright, Julia M., Nature by Seaside and Wayside, 50
Philosophy and the Concepts of Modern Science, Oliver L. Reiser, 59
Philosophy of Science, A., Philip Eichler, 212
Photo Almanac and Market Guide, Universal, Symposium, 122
Photograph, Making a, Ansel Adams, 50
Photographic Enlarging, Franklin I. Jordan, 121
Photography, C. E. Kenneth Mees, 121
Photography, Elementary, C. B. Neblette, Frederick W. Brehm, and Everett L. Priest, 121
Photography for the Amateur, George W. French, 49
Photography, Modern, C. G. Holme, 121
Photography, New Ways in, Jacob Deschin, 121
Photography, 1937, The American Annual of, Frank R. Fraprie, 50
Photography, 1938, The American Annual of, Frank R. Frapie, 258
Photography, Practical Amateur, William S. Davis, 122
Photography Today, D. A. Spencer, 122
Physical Education with Respect to Certain Personal Traits, A Comparative Study of Undergraduate Women Majors and Non-Majors in, Anne Schley Duggan, 171
Physical Theory, The Nature of, P. W. Bridgman, 115
Physics, An Introductory Course in College, Newton H. Black, 54
Physics, A Textbook of, Charles A. Culver, 56
Physics, Exploring in, Reginald J. Stephenson, 122
Physics Guide and Laboratory Exercises, W. B. Henderson, 171
Physics, Mastery Units in, Michael N. Idelson, 170
Physics, The Philosophy of, Max Planck, 57
Physics, The Renaissance of, Karl K. Darrow, 219
Physics, Unified, Gustav L. Fletcher, Irving Mosbacher, and Sidney Lehman, 216
Pincus, Gregory, The Egg of Mammals, 118
Pitt, Frances, Nature in the Wild, 220
Planck, Max, The Philosophy of Physics, 57
Plant Life, D. B. Swingle, 49
Polar Regions, The, J. M. Scott, 116
Powers, S. R., Neuner, Elsie F., and Bruner, Herbert B., Directed Activities II, 169
———, Directed Activities III, 169

Preston, Carleton E., The High School Science Teacher and His Work, 215
Principles of Teaching, George D. Strayer, George W. Frasier, and Winfield D. Armentrout, 57
Psychology, Elements of, Knight Dunlap, 49
Psychology of Wants, Interests and Attitudes, The, Edward L. Thorndike and Associates, 58

Qualitative Analysis, J. S. Long, H. V. Anderson and T. H. Hazelhurst, 118
Qualitative Chemical Analysis, A Brief Course in, Louis J. Curtman, 118

Radio Amateur's Handbook, The, A. Frederick Collins, 166
Radio Amateur's Handbook, The, Ross A. Hull, 223
Radio, John Langdon-Davies, 166
Rambles in Europe, Roderick Peattie, 115
Recollections and Reflections, Sir J. J. Thomson, 220
Reh, Frank, Astronomy for the Layman, 118
Reiser, Oliver L., Philosophy and the Concepts of Modern Science, 59
Rice, Thurman B., A Textbook of Bacteriology, 124
Rich Land, Poor Land, Stuart Chase, 167
Roberts, G. F., and Smith, H. C., Mastery Units in Chemistry, 170
Roehl, Katherine M., and Newman, H. H., A Laboratory Manual for General Zoology, 55

Schuchert, Charles, and Dunbar, Carl O., A Textbook of Geology, Part II: Historical Geology, 53
Science and the Elementary School, W. G. Croxton, 216
Science and the Public Mind, Benjamin Gruenberg, 223
Science: A Story of Progress and Discovery, Ira C. Davis and Richard W. Sharp, 120
Science and the Young Child, Symposium, 52
Science Experiences with Home Equipment, Carleton John Lynde, 258
Science for High School, Useful, Henry T. Weed, Frank A. Rexford, and Franklin B. Carroll, 54
Science, Frontiers of, Carl Trueblood Chase, 210
Science Library, The High-School, Hanor A. Webb, 244
Science, Man Conquers the World with, William L. Nida, 117
Science, More Simple, Julian Huxley and E. N. daC. Andrade, 211
Science, Socialized for the High School, Senior, George L. Bush, Theodore Ptacek, and John Kovats, 210
Science Stories, Book I, Wilbur L. Beauchamp, Gertrude Crampton and William S. Gray, 117
Science Stories, Book III, Wilbur L. Beauchamp, Harriet M. Fogg, Gertrude Crampton, and William S. Gray, 259
Science Teacher and His Work, The High School, Carleton E. Preston, 215
Science, The Advancing Front of, George W. Gray, 258
Science, The Backgrounds and Foundations of Modern, Richard E. Lee, 219
Science, The New World of, A. Frederick Collins, 166
Science, The World of, F. Sherwood Taylor, 219
Scientific Interests in the Old South, Thomas Cary Johnson, Jr., 59
Scott, J. M., The Polar Regions, 116
Secondary Education, A Challenge to, Samuel Everett, 168
Sherman, Henry C., Chemistry of Food and Nutrition, 55
———, Food and Health, 55
———, Food Products, 55
Ships Ahoy!, Lizette Edholm, 215
Sinnott, Edmund W., Botany, Principles and Problems, 56
Smith, Harriet, and Mitchell, Adelphia, Some Helps in the Teaching of Geography, 53
Smith, J. Russell, Other World Neighbors, 53
———, Our Country and Northern Neighbors, 53
———, Our European Neighbors, 53
———, Our Industrial World, 53
Spencer, D. A., Photography Today, 122
Statistical Tables, Their Structure and Their Use, Helen M. Walker and Walter N. Durost, 213
Stemen, Thomas R., and Myers, W. Stanley, Oklahoma Flora, 222
Stephenson, Reginald J., Exploring in Physics, 122
Stout, Velma, Wires Round the World, 215
Strayer, George D., Frasier, George W., and Armentrout, Winfield D., Principles of Teaching, 57
Strebel, Ralph F., Nature of Supervision of Student Teaching in University Using Cooperative Public High Schools, 213
Student Teaching in University Using Cooperative Public High Schools, Nature of Supervision of, Ralph F. Strebel, 213
Swingle, D. B., Plant Life, 49
Symposium, Keystone Primary Series, 170
———, Our Changing World, 215
———, Science and the Young Child, 52
———, The Home Chemist, 54
———, Universal Photo Almanac and Market Guide, 122

Taylor, F. Sherwood, The World of Science, 219
Taylor, Frank J., and Taylor, Ruth, Our U. S. A.—A Gay Geography, 123
Teaching, The Technique and Administration of, Noble Lee Garrison, 168
Teeters, William R., Bridges, Russell E., and Lee, William C., Workbook for Science at Work, 170
Telescope, Through the, Edward Arthur Fath, 49
Television, Sydney A. Moseley and Herbert McKay, 221
Tests of 1933, 1934, and 1935, Educational, Psychological, and Personality, Oscar K. Buros, 115
Thirty-first Annual Report, The Carnegie Foundation for the Advancement of Teaching, 222

Thomson, Sir J. J., Recollections and Reflections, 220
Thorndike, Edward L., and Associates, The Psychology of Wants, Interests and Attitudes, 58
Thunder Bird, The, Wainwright Evans, 215
Time, Please, Tell Me the, Lillian J. Bragdon, 51
Towse, Anna B., Mathews, Florence E., and Gray, William S., Health Stories, 117
Trees, Stars, and Birds, Edwin Lincoln Moseley, 211

Unit-Materials, Compton's Pictured Teaching, F. E. Compton and Company, 171
United States Among the Nations, The, Wallace W. Atwood, 52
Universe, Unveiling the, Norton Wagner, 123

Valley, The Making of the, Frederick K. Morris, 53
Verrill, A. Hyatt, Strange Insects and Their Stories, 217
Vis[illegible]tephen S., Aids to the Student of Conservation, 260

W. P. A. Federal Writers' Project in the City of New York, Who's Who in the Zoo; Natural History of Mammals, 218
Walker, Helen M., and Durost, Walter N., Statistical Tables, Their Structure and Their Use, 213
Walton, Everett P., and Foss, Philip E., Social Biology, 119
Wagner, Norton, Unveiling the Universe, 123
Watkins, Ralph K., and Bedell, Ralph C., General Science for Today, 120
Weather, Living with the, Clarence A. Mills, 57
Webb, Hanor A., The High-School Science Library, 224
Weed, Henry T., Rexford, Frank A., and Carroll, Franklin B., Useful Science for High School, 54
Weidlein, Edward R., and Hamor, William A., Glances at Industrial Research, 211
Wells, Harrington, The Teaching of Nature Study and the Biological Sciences, 170
Wheels, The Story Book of, Maud and Miska Petersham, 117
White, C. Langdon, and Renner, George T., Geography, 212
Whitnall, Harold O., A Parade of Ancient Animals, 171
Wild Animal World—Behind the Scenes of the Zoo, Raymond L. Ditmars and William Bridges, 260
Wilderness Wanderers, Wendell Chapman and Lucie Chapman, 216
Wilson, P. W., The Romance of the Calendar, 167
Wires Round the World, Velma Stout, 215
Wonders of Nature Series, The, F. Martin Duncan and L. T. Duncan, 51
Woodruff, Lorande Loss, Foundations of Biology, 55
Workbook for Science at Work, William R. Teeters, Russell E. Bridges and William C. Lee, 170
Workbook—Science for Today, Francis D. Curtis, 169
Workers, Laura Zirbes and Marian J. Wesley, 171
World Around Us, The, Paul Karlson, 124
World, Our Changing, Symposium, 215
World, Our Wonderful, Frances Jenkins Olcott, 213
Worlds without End, H. Spencer Jones, 56
Wright, Forrest B., Electricity in the Home and on the Farm, 219
Wrightstone, J. Wayne, Appraisal of Experimental High School Practices, 52

Zirbes, Laura, and Keliher, Alice V., The Book of Pets, 171
Zirbes, Laura, and Wesley, Marian J., The Story of Milk, 171
———, Workers, 171
Zoology, A Laboratory Manual for General, Katherine M. Roehl and H. H. Newman, 55
Zoology, College, Robert W. Hegner, 55
Zoology, Outlines of General, Horatio H. Newman, 55
Zorra: The Biography of a Gray Fox, Vance Joseph Hoyt, 49

EDITORIALS AND EDUCATIONAL NEWS

39–43; 103–110; 160–162; 201–205; 251–253